

GUIDELINES FOR INVENTORY AND MONITORING OF INVASIVE PLANTS



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- Handout 2nd draft, edited by Ron Hiebert & copy editor and reviewed by participants
- One more edit and then posted on the I&M web site



BACKGROUND

- INVASIVE SPECIES MAJOR THREAT TO NATIVE BIODIVERSITY
- INVASIVE PLANTS IDENTIFIED AS MAJOR STRESSOR AND VITAL SIGN BY ALL/MOST NETWORKS
- TO AVOID DUPLICATION, INCREASE EFFICIENCY, AND ENCOURAGE CONSISTENCY IN APPROACH, HOLD NATIONAL WORKSHOP



PURPOSE

- DEVELOP CONCEPTUAL FRAMEWORK/GUIDELINES FOR INVENTORY AND MONITORING OF INVASIVE PLANTS
- MAKE EXISTING GUIDELINES, PROTOCOLS, AND TOOLS READILY AVAILABLE TO NETWORKS



WORKSHOP FORMAT

- INVITED PRESENTATIONS ON KEY ISSUES
- AMPLE TIME FOR FACILITATED GROUP AND BREAKOUT GROUP DISCUSSION
- DRAFT REPORT PREPARED BY PARTICIPANTS DURING WORKSHOP



PARTICIPANTS

- NATIONAL PARK SERVICE
- OTHER FEDERAL AGENCIES
- STATE AGENCY
- NGO
- ACADEMIA



NPS PARTICIPANTS

- PAM BENJAMIN – IMRO
- JEFF CONNORS – ROMO
- LINDA DREES – BMRD
- ANGIE EVENDEN – NCPN
- STEVE FANCY – NRI
- LINDA GREGORY - ACAD
- RON HIEBERT – CPCESU
- LISA JAMESON – NCR
- BARBARA MORITSCH-PTRE
- PAIGE SPENCE – ARO
- LISA THOMAS – PCLTEM
- GARY WILLIAMS - NRI



OTHER PARTICIPANTS

- RITA BEARD – USFS
- ERIC LANE – COLO AG
- DIANE LARSON –
USGS/BRD
- LLOYD LOOPE –
USGS/BRD
- NOEL PAVLOVIC –
USGS/BRD
- JOHN RANDALL – TNC
- ROGER SHELEY – MSU
- TOM STOHLGREN –
USGS/BRD



ASSUMPTIONS

- PROTOCOLS FOR MONITORING PLANTS EXIST AND CAN BE UTILIZED FOR INVASIVE PLANTS
- THUS, PURPOSE OF GUIDELINES IS TO PROVIDE PROCESS FOR NETWORKS TO SELECT PROTOCOL THAT BEST FITS THEIR OBJECTIVES AND AVAILABLE RESOURCES



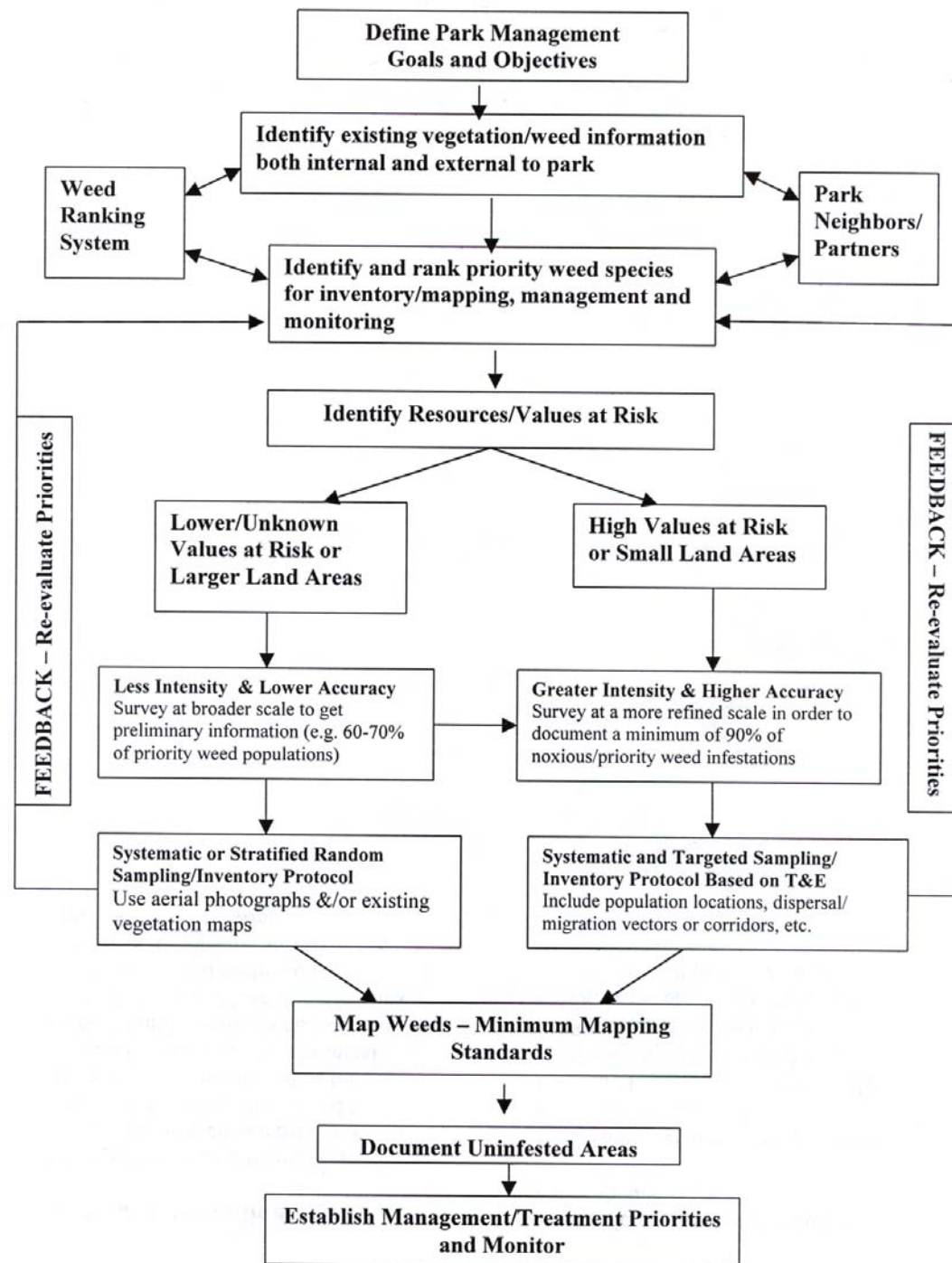
INVASIVE PLANT I&M GOALS

- DETERMINE THE DISTRIBUTION AND ABUNDANCE OF INVASIVE SPECIES WITHIN PARKS AND THEIR SURROUNDINGS
- PREVENT, DETECT, AND ERADICATE NEW INVASIONS
- EVALUATE THE EFFECTS OF MANAGEMENT ACTIONS ON TARGETED INVASIVES AND RECOVERY OF THE ECOSYSTEMS THEY HAVE INVADED
- DETERMINE STATUS AND TRENDS OF PLANT INVASIONS OVER TIME AND SPACE AND DEVELOP PREDICTIVE CAPABILITIES TO BETTER GUIDE FUTURE MONITORING AND MANAGEMENT EFFORTS



GUIDELINES FOR INVENTORY AND MAPPING

- ADOPTED STANDARDS AND GUIDELINES DEVELOPED BY THE IMR – Pam Benjamin
- ADOPTED NAWMA MAPPING AND DATA STANDARDS
- PRECISE PROTOCOLS RECOMMENDED





GUIDELINES FOR EARLY DETECTION AND PREVENTION MONITORING

- MUST KEEP ABREAST OF NEW AND EMERGING THREATS (INVASIVE SPECIES)
- DEVELOP MULTI-FACETED SURVEY AND MONITORING SYSTEM
- INCORPORATE QUICK MANAGEMENT RESPONSE
- GOOD PROTOCOLS MAY NOT EXIST

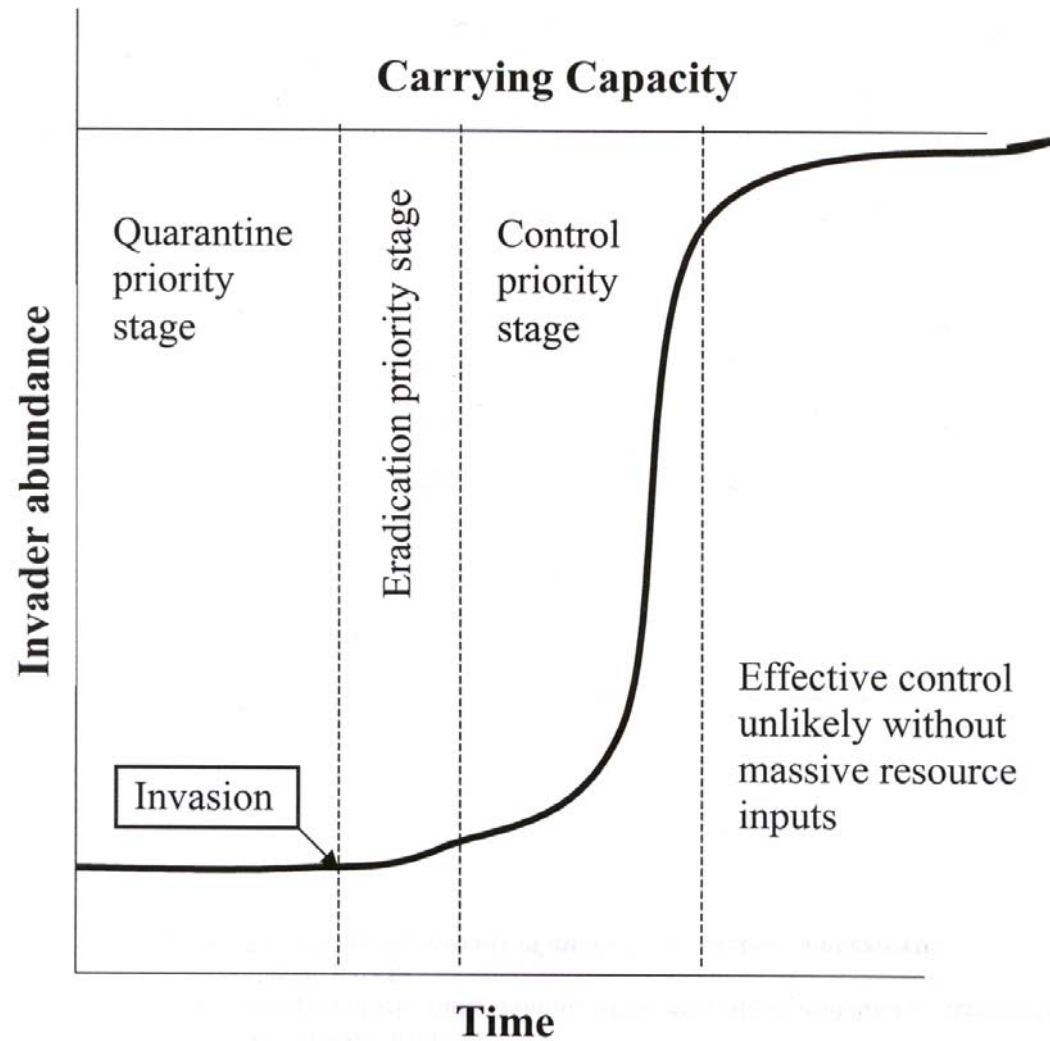


Figure from Hobbs, Richard J. and Stella E. Humphries. 1995. An integrated approach to the ecology and management of plant invasions. *Conservation Biology* 9(4): 761-770.



MONITORING EFFECTS OF MANAGEMENT

- GROUP AGREED THAT GOAL IS NOT TO KILL WEED BUT TO PRESERVE/RESTORE SYSTEM
- MONITORING MUST ADDRESS TRENDS TOWARDS DESIRED FUTURE CONDITION OF SITE
- SOMEHOW MAKE THIS ADDRESS STRATEGIC GOALS



MONITORING STATUS AND TRENDS

- INFORMATION/DATA MUCH MORE VALUABLE IF VIEWED IN THE CONTEXT OF THE BIOREGION AND OVER TIME
- METHODS MUST BE SCIENTIFICALLY SOUND, REPEATABLE, QUANTITATIVE, AND COMPATABLE FOR BIOREGION
- COLLECTION OF ATTRIBUTE DATA USEFUL TOWARDS DEVELOPING PREDICTIVE MODELS



OTHER ISSUES

- THINKING BEYOND BOUNDARIES
ESSENTIAL FOR INVASIVE SPECIES
MONITORING
- MONITORING NEEDS TO BE TIED TO
CLEAR GOALS AND MEASURABLE
OBJECTIVES
- PRIORITIZING SPECIES AND
PLACES WILL BE NECESSARY



CONCLUSIONS

- THIS DOCUMENT GIVES GUIDELINES ON CONSIDERATIONS AND PROCESSES FOR SELECTING PROTOCOLS
- THIS DOCUMENT GUIDES USERS TO EXISTING INFORMATION AND DECISION MAKING TOOLS
- THIS DOCUMENT DOES NOT RECOMMEND OR PROVIDE INFORMATION ON SPECIFIC PROTOCOLS FOR MONITORING INVASIVE PLANTS
- THESE GUIDELINES WILL NOT GUARANTEE CONSISTENT PROTOCOLS AMONG NETWORKS

